

What is claimed is:

Sub Bg 1. An image processing method of carrying out image processing on a digital image signal, the image processing method comprising the steps of:

5 extracting a characteristic value representing a characteristic of an image sensing device from digital image signals of a plurality of images of subjects photographed by the image sensing device; and

10 carrying out image processing according to the characteristic value on the digital image signals.

2. An the image processing method as claimed in Claim 1, wherein the characteristic value, when each of the digital image signals is composed of RGB color signals, is a total average of averages of the digital image signals and

15 the image processing converts RGB color signals in a digital image signal representing an image of a gray subject to be equalized, based on the total average.

20 3. An image processing method as claimed in Claim 2, wherein the total average is an average of weight-averages based on weight coefficients, each of which is determined by a color of each pixel in each digital image signal.

4. An image processing method as claimed in Claim 2, wherein the image processing is carried out by weighting the average or the weight-averages by using a predetermined weight coefficient.

25 5. An image processing method as claimed in Claim 3, wherein

the image processing is carried out by weighting the weight-averages by using a predetermined weight coefficient.

6. An image processing method as claimed in Claim 1, wherein the characteristic value is extracted based on a histogram or a cumulative histogram of each of the digital image signals.

7. An image processing method as claimed in Claim 6, wherein the histogram or the cumulative histogram, when each of the digital image signals is composed of color signals, is found based on the digital image signal from which high saturation pixels have been eliminated.

8. An image processing method as claimed in Claim 6, wherein the image processing converts, based on the characteristic value, contrast of the image represented by the digital image signal.

9. An image processing method as claimed in Claim 7, wherein the image processing converts, based on the characteristic value, contrast of the image represented by the digital image signal.

10. An image processing method as claimed in Claim 1, wherein the characteristic value, when each of the digital image signals is composed of RGB color signals, is a value regarding chroma or color saturation of each of the digital image signals and

the image processing converts the chroma of the digital image signal, based on the characteristic value.

11. An image processing method as claimed in Claim 1, wherein the characteristic value, when each of the digital image

signals is composed of RGB color signals, is a value of each color signal in each pixel in each of the digital image signals relative to an average of the color signals thereof, and

the image processing converts the digital image signal by referring to a table representing a relationship between the characteristic value and the average of the color signals.

12. An image processing method as claimed in Claim 1, wherein the characteristic value, when each of the digital image signals is composed of RGB color signals, is a value of each color signal or values of color signals other than one of the RGB color signals in each pixel in each of the digital image signals relative to the value of the one color signal, and

the image processing converts the digital image signal by referring to a table representing a relationship between the value of the one color signal and the characteristic value.

13. An image processing method as claimed in Claim 11, wherein the characteristic value is found based on the digital image signal from which high saturation pixels have been eliminated.

14. An image processing method as claimed in Claim 12, wherein the characteristic value is found based on the digital image signal from which high saturation pixels have been eliminated.

15. An the image processing method as claimed in Claim 1, wherein the characteristic value is extracted from a thumbnail

image signal of each of the digital image signals.

16. An image processing method as claimed in Claim 1, wherein the characteristic value, in the case where each digital image signal is of JPEG image file format, is extracted based on a signal of a direct current component in the JPEG image file.

17. An image processing method as claimed in Claim 1, wherein the image sensing device converts information of a photographed subject into a digital image signal and comprises recording means for recording the digital image signal in a recording medium.

18. An image processing method as claimed in Claim 17, wherein a flag indicating whether or not the digital image signal has been corrected after photographing is recorded in the recording medium together with the digital image signal, and the extraction of the characteristic value and the image processing are carried out only on a digital image signal having the flag among the digital image signals.

19. An image processing apparatus for carrying out image processing on a digital image signal, the image processing apparatus comprising:

characteristic value extracting means for extracting a characteristic value representing a characteristic of an image sensing device from digital image signals of a plurality of images of subjects photographed by the image sensing device; and

image processing means for carrying out image processing

BA according to the characteristic value on the digital image signals.